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10/589,400	08/14/2006	Tsuyoshi Kasaura	1190-0634PUS1	7042
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BIRCH STEWART KOLASCH & BIRCH			TABOR, AMARE F	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary	Application No.	Applicant(s)
	10/589,400	KASAURA ET AL.
Examiner	Art Unit	
Amare Tabor	2139	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 14 August 2006.
 2a) This action is FINAL. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-14 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 1-14 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO/SB/08)
 Paper No(s)/Mail Date 08/14/2006

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____
 5) Notice of Informal Patent Application
 6) Other: _____

DETAILED ACTION

1. Claims 1-14 are examined.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 10/589,400, filed on 08/14/2006.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Balfanz et al (US 2003/0149874 A1, referred as "**Balfanz**" hereinafter) in view of Hind et al. (US 6, 772, 331 B1, referred as "**Hind**" hereinafter)..

As per Claim 1, Balfanz teaches,

A data sending/receiving device (see 310 in *Fig. 3*) for issuing a digital certificate (see *PK1* at *step S110 of Fig. 5*) to a new data sending/receiving device (see 320 in *Fig. 3*), when the data sending/receiving device causes the new data sending/receiving device to participate in a network formed by data sending/receiving devices (see *abstract*; *Fig. 2*; and for example, paragraph [0002] and [0010]) and each having a digital certificate (see *PK1 & PK2* in *Fig. 5*) that certifies authority to participate in the network (see *step S160* in *Fig. 5*); the data sending/receiving device comprising:

a first communication section which performs communication in the network (see 314 & 324 in *Fig. 3*; and *MAIN WIRELESS LINK INTERFACE 434* in *Fig. 4*);

a second communication section, to which the new data sending/receiving device can be connected (see 312 & 322 in *Fig. 3*; and *LOCATION-LIMITED CHANNEL INTERFACE 432* in *Fig. 4*);

and a control section which performs a process of issuing the digital certificate (see *AUTHENTICATION PROGRAM 426* and *AUTHENTICATOR 428* in *Fig. 4*);

wherein when the new data sending/receiving device is connected to the second communication section, the control section judges whether or not the new data sending/receiving device is a device having a communication means that can communicate in the network, in accordance with device type information of the new data sending/receiving device received via the second communication section from the new data sending/receiving device (see *Fig. 3*; and for example, paragraph [0033]-[0036]), and

if the new data sending/receiving device is judged as a device having a communication means that can communicate in the network the created digital certificate is sent via the second communication section to the new data sending/receiving device (see *Fig. 5*; where at steps *S110-120 PK1 and PK2 are sent using a location-limited channel 432 of Fig. 4*).

Balfanz fails to teach explicitly the control section creates the digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device, the device identifier being received via the second communication section from the new data sending/receiving device.

However, in the same field of endeavor, Hind teaches creating digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device (see *abstract* and *Device Certificate 1050 -including Device Identifier 4010* in *Fig. 4*), the device identifier being received via the second communication section from the new data sending/receiving device (see *Fig. 3*; and for example, column 1, lines 17-21 and column 6, lines 10-25).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to combine the teachings of Hind and to the system of Balfanz because both inventions are directed to securing a channel between devices using public key cryptography. One having ordinary skill in the art would be motivated to create a digital certificate by using a device identifier as taught by Hind in order to distinctly identify the second device that would require a secure communication with the first device of an enterprise (see column 2, lines 11-54 of Hind).

As per Claim 4, Balfanz teaches,

A data sending/receiving device (see *310* in *Fig. 3*) for issuing a digital certificate (see *PK1* at *step S110* of *Fig. 5*) to a new data sending/receiving device (see *320* in *Fig. 3*), when the data sending/receiving device causes the new data sending/receiving device to participate in a network formed by data sending/receiving devices (see *abstract*; *Fig. 2*; and for example, paragraph [0002] and [0010]) each having a digital certificate that certifies authority to participate in the network (see *PK1 & PK2* and *step S160* in *Fig. 5*); the data sending/receiving device comprising:

a communication section which performs communication in the network (see 314 & 324 in *Fig. 3*; and *MAIN WIRELESS LINK INTERFACE 434* in *Fig. 4*); and

a control section which performs a process of issuing the digital certificate (see *AUTHENTICATION PROGRAM 426* and *AUTHENTICATOR 428* in *Fig. 4*); wherein

if the new data sending/receiving device is judged as a device having a communication means that can communicate in the network, the control sends the created digital certificate via the communication section (see *Fig. 3*; and for example, paragraph [0033]-[0036]) and via the data sending/receiving device to which the new data sending/receiving device is connected (see *Fig. 5*; where at steps *S110-120 PK1 and PK2 are sent using a location-limited channel 432 of Fig. 4*).

Balfanz fails to teach explicitly the control section creates a digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device.

However, Hind teaches creating a digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device (see *Fig. 3, abstract* and *Device Identifier 4010* in *Fig. 4*; and for example, column 1, lines 17-21 and column 6, lines 10-25).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to create a digital certificate by using a device identifier as taught by Hind in order to distinctly identify the second device that would require a secure communication with the first device (see *BACKGROUND* of Hind).

As per Claim 7, Balfanz teaches,

A digital certificate issuing method (see *Fig. 5 and abstract*) for issuing a digital certificate (see *PK1 at step S110 of Fig. 5*) to a new data sending/receiving device (see *320 in Fig. 3*) when the new data sending/receiving device participates in a network formed by data sending/receiving devices each having a digital certificate that certifies authority to participate in the network (see *Fig. 2 & 5*; and for example, paragraph [0002] and [0010]), the method comprising the steps of:

judging, by a certain data sending/receiving device that is one of the data sending/receiving devices forming the network and is connected to the new data sending/receiving device, whether or not the new data sending/receiving device is a device having a communication means that can communicate in the network in accordance with device type information of the new data sending/receiving device received from the new data sending/receiving device; and the new data sending/receiving device is judged as being a device having a communication means that can communicate in the network (see *Fig. 3*; and for example, paragraph [0033]-[0036]).

Balfanz fails to teach explicitly creating a digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device received from the new data sending/receiving device and sending the created digital certificate to the new data sending/receiving device, by the certain data sending/receiving device.

However, Hind teaches creating a digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device received from the new data sending/receiving device and sending the created digital certificate to the new data sending/receiving device, by the certain data sending/receiving device (see *Fig. 3, abstract* and *Device Identifier 4010* in *Fig. 4*; and for example, column 1, lines 17-21 and column 6, lines 10-25).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to create a digital certificate by using a device identifier as taught by Hind in order to distinctly identify the second device that would require a secure communication with the first device (see BACKGROUND of Hind).

As per Claim 11, Balfanz teaches,

A digital certificate issuing method (see *Fig. 5 and abstract*) for issuing a digital certificate to (see *PK1 at step S110 of Fig. 5*) a new data sending/receiving device (see 320 in *Fig. 3*) when the new data sending/receiving device participates in a network formed by data sending/receiving devices each having a digital certificate that certifies authority to participate in the network (see *Fig. 2 & 5*; and for example, paragraph [0002] and [0010]), the method comprising the steps of:

judging, by one of the data sending/receiving devices forming the network, whether or not the new data sending/receiving device is a device having a communication means that can communicate in the network in accordance with device type information of the new data sending/receiving device received via a data sending/receiving device, to which the new data sending/receiving device is connected, from the new data sending/receiving device; and the one of the data sending/receiving devices forming the network, which is other than the data sending/receiving device to which the new data sending/receiving device is connected, judges that the new data sending/receiving device is judged as being a device having a communication means that can communicate in the network (see *Fig. 3*; and for example, paragraph [0033]-[0036]).

Balfanz fails to teach explicitly creating a digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device received via the data sending/receiving device, to which the new data sending/receiving device is connected.

However, Hind teaches creating a digital certificate for the new data sending/receiving device by using a device identifier specific to the new data sending/receiving device received via the data sending/receiving device, to which the new data sending/receiving device is connected (see *abstract* and *Device Certificate 1050 -including Device Identifier 4010* in *Fig. 3 & 4*; and for example, column 1, lines 17-21 and column 6, lines 10-25).

It would have been obvious to a person having ordinary skill in the art at the time of Applicant's invention to create a digital certificate by using a device identifier as taught by Hind in order to distinctly identify the second device that would require a secure communication with the first device of an enterprise (see *BACKGROUND* of Hind).

As per Claims 2, 5, 8 and 12, Balfanz teaches,

wherein even when the new data sending/receiving device is judged as being the device having the communication means which can participate in the network, if the new data sending/receiving device already has a digital certificate (see *PK2* in *Fig. 5*), the control section does not issue a new digital certificate (*since the second device 320 of Fig. 3 have a public key PK2, a new digital certificate will not be issued*).

As per Claims 3, 6, 9 and 13, Balfanz teaches,

wherein even when the new data sending/receiving device is judged as being the device having the communication means which can participate in the network and the new data sending/receiving device already has a digital certificate (see *PK2* in *fig. 5*), if the digital certificate that is already held in the new data sending/receiving device is for another network different from the network (see *340* in *Fig. 3* and *MAIN WIRELESS LINK RX/TX 444* in *Fig. 4*; and for example, paragraphs [0037], [0039] to [0041] and [0047],).

Balfanz fails to teach explicitly the control section creates a digital certificate for the new data sending/receiving device by using the device identifier and sends the created digital certificate to the new data sending/receiving device are performed.

However, Hind teaches creating a digital certificate for the new data sending/receiving device by using the device identifier and sends the created digital certificate to the new data sending/receiving device are performed (see *abstract* and *Device Identifier 4010* in *Fig. 3 & 4*; and for example, column 1, lines 17-21 and column 6, lines 10-25).

As per Claims 10 and 14, Balfanz teaches,

wherein the new data sending/receiving device verifies validity of the received digital certificate (see AUTHENTICATION PROGRAM 424 and AUTHENTICATOR 428 in *Fig. 4*; where the validity of the public key certificate is verified),

if it is confirmed that the validity exists, the new data sending/receiving device notifies the data sending/receiving device which has issued the digital certificate that the digital certificate has been accepted (see steps S150-160 in *Fig. 5*), and

if it is not confirmed that the validity exists, the new data sending/receiving device requests the data sending/receiving device which has issued the digital certificate to issue a digital certificate again RESUME COMMUNICATION S170 in *Fig. 5*).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. (See PTO-892).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amare Tabor whose telephone number is (571) 270-3155. The examiner can normally be reached on Mon-Fri 7:30a.m. to 5:00p.m., EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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SYED A. ZIA 07/21/2017
PRIMARY EXAMINER